

1/8

Fig.1

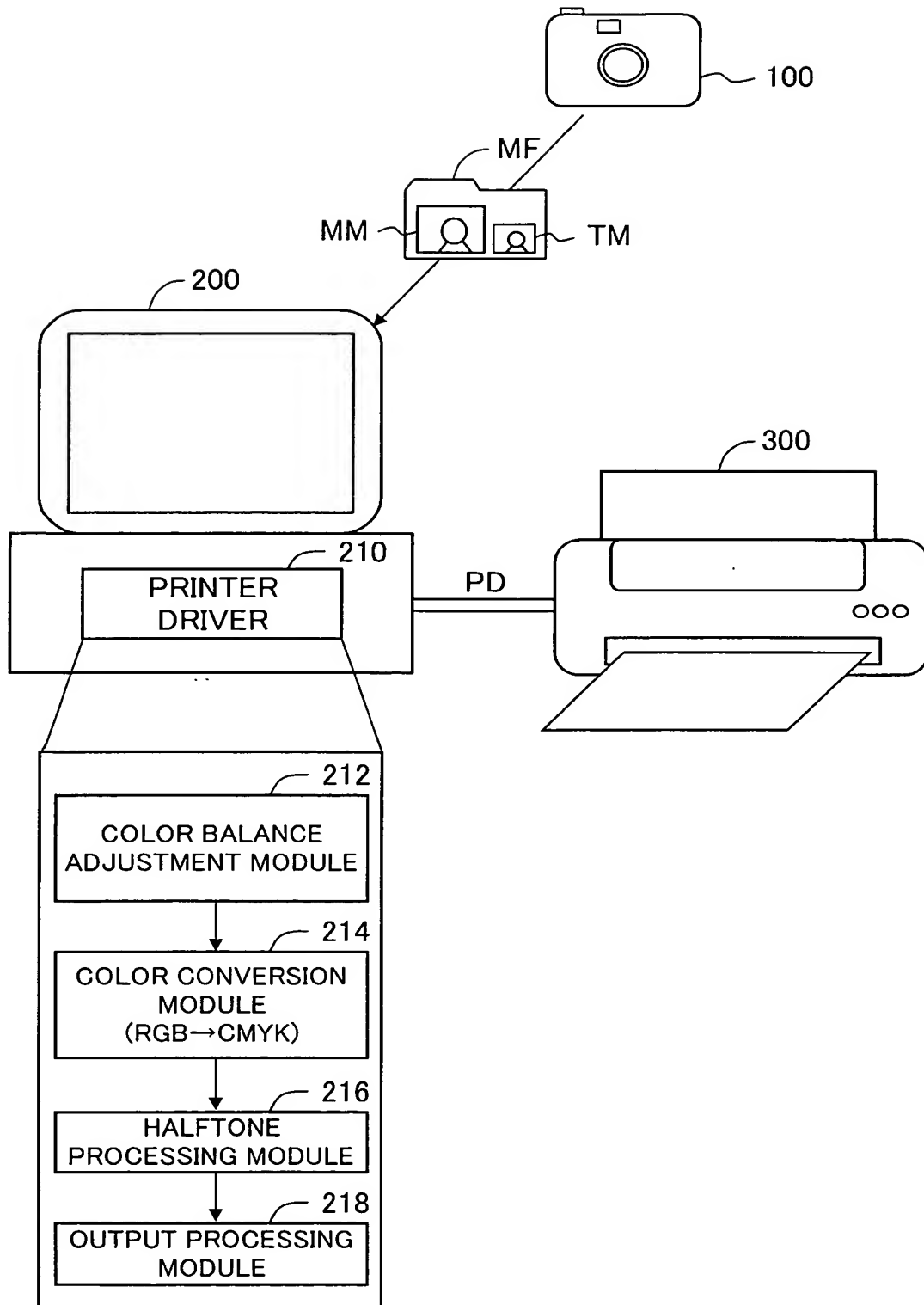
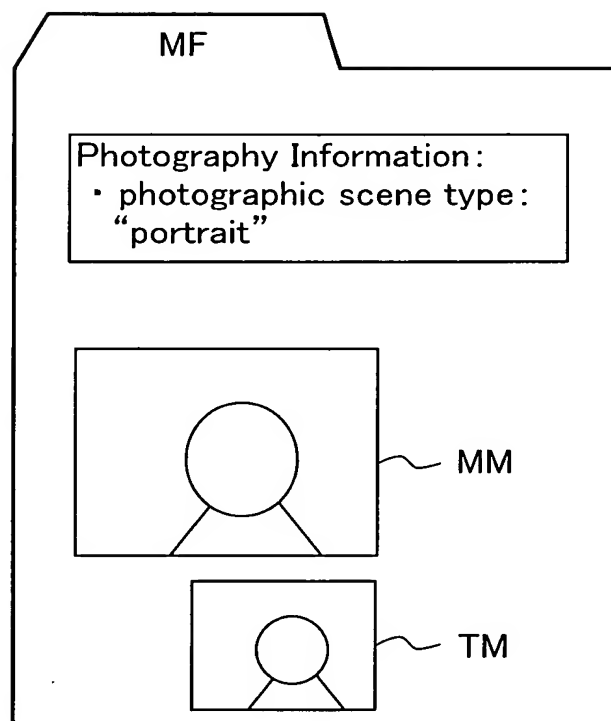
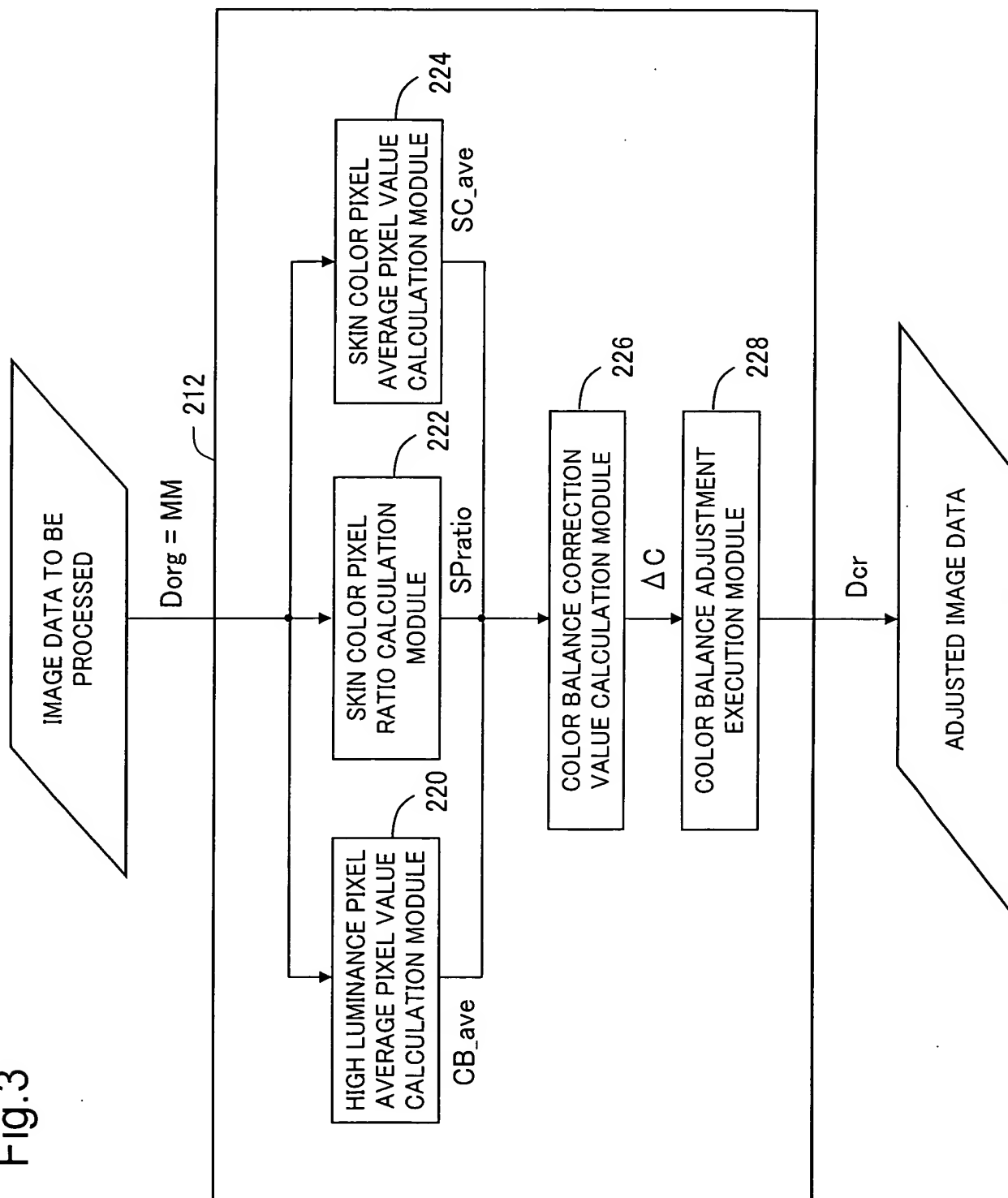


Fig.2



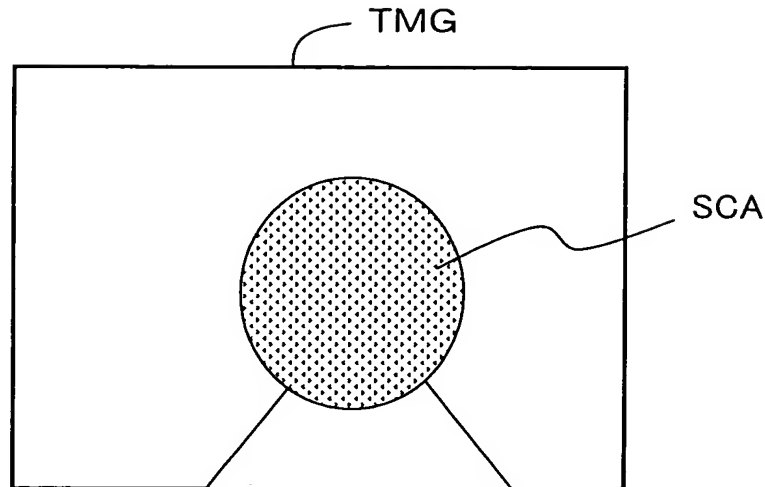
3/8

Fig.3



4/8

Fig.4



Color Balance Adjustment Parameters

- High luminance pixel average pixel value CB_{ave} :
 Color component average values: $CB_{ave}(R)$, (G) and (B)
 Average luminance value: $CB_{ave}(Y)$
 Average hue value: $CB_{ave}(H)$
- Skin color pixel ratio $SPratio$:
 $SPratio = [\text{skin color pixel count}] / [\text{total pixel count}]$
- Skin color pixel average pixel value SC_{ave} :
 $SC_{ave}(R)$, (G) , (B)
- Skin color target value SC_{target} :
 $SC_{target}(R)$, (G) , (B)
- Color balance correction values ΔC :

$$\Delta C(R) = K1 \times [CB_{ave}(Y) - CB_{ave}(R)]$$

$$+ k2 \times [SC_{target}(R) - SC_{ave}(R)] \times SPratio$$

$$\Delta C(G) = K1 \times [CB_{ave}(Y) - CB_{ave}(G)]$$

$$+ k2 \times [SC_{target}(G) - SC_{ave}(G)] \times SPratio$$

$$\Delta C(B) = K1 \times [CB_{ave}(Y) - CB_{ave}(B)]$$

$$+ k2 \times [SC_{target}(B) - SC_{ave}(B)] \times SPratio$$

5/8

Fig.5

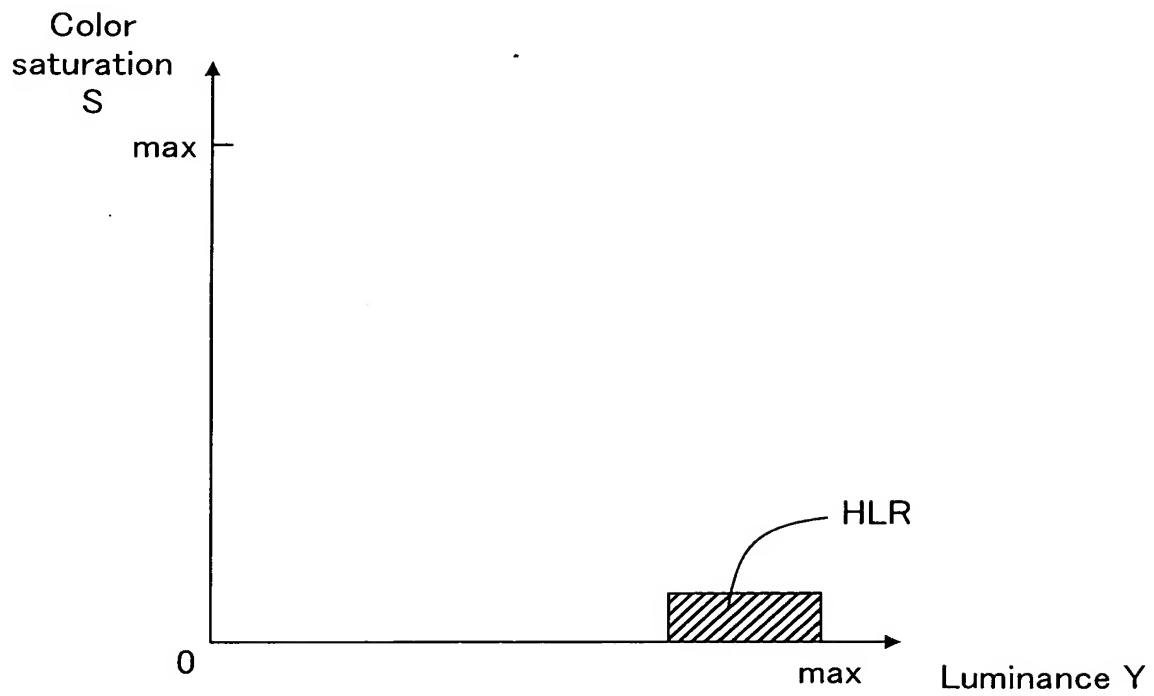
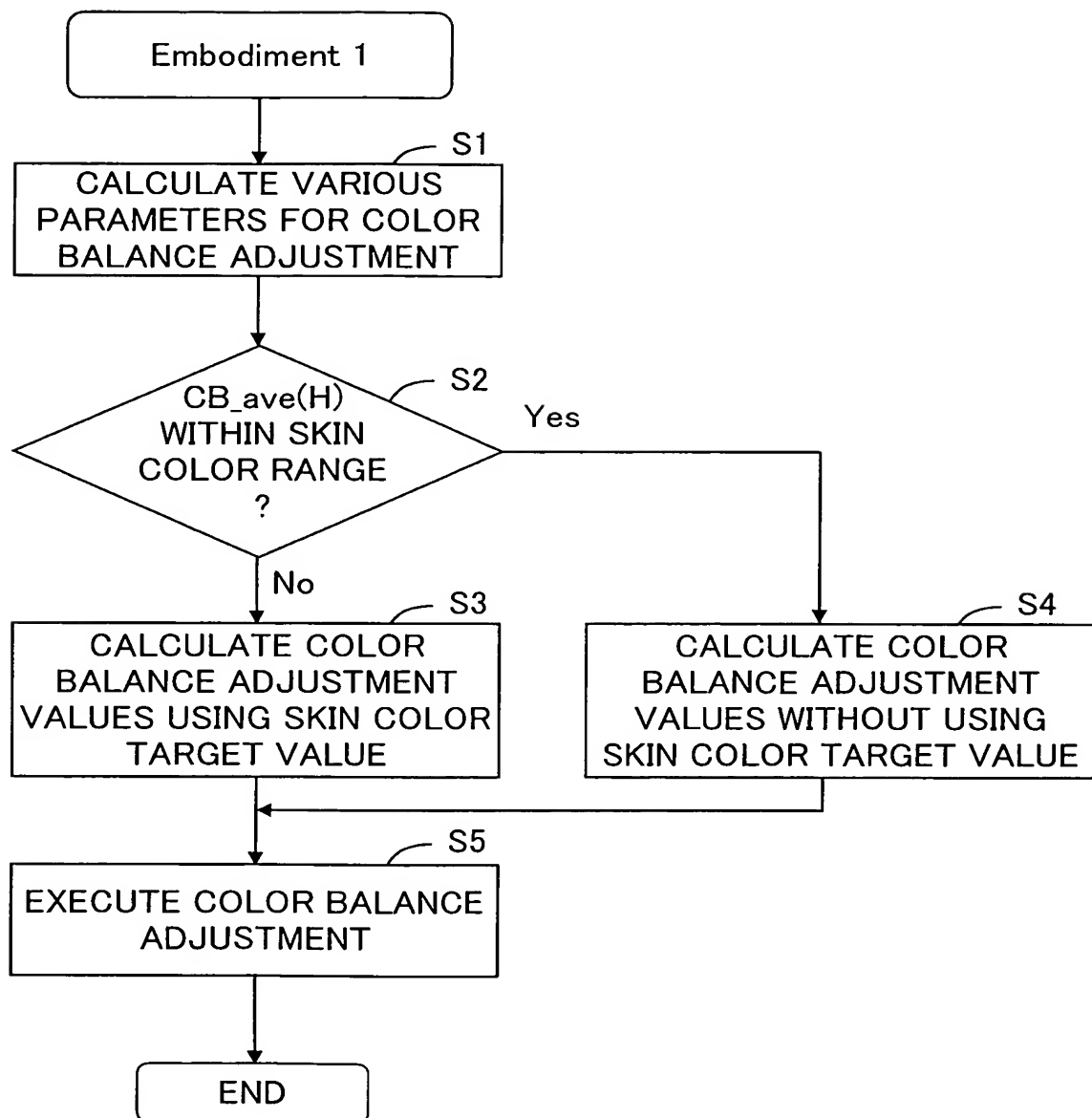
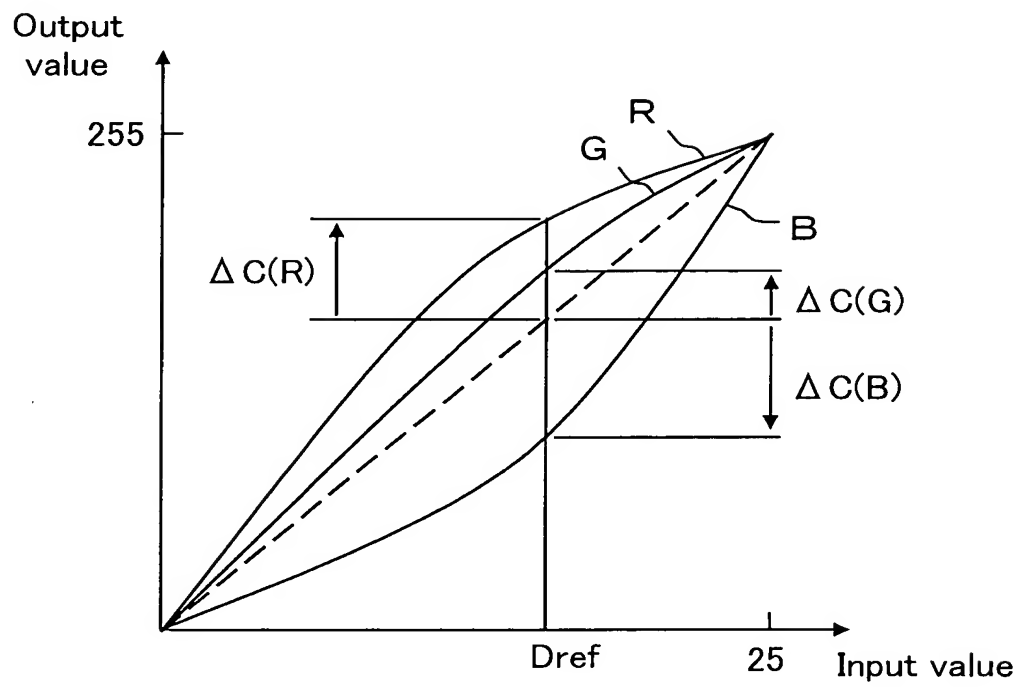


Fig.6



7/8

Fig.7



Dref=CB_ave(Y)
or
Dref=192

8/8

Fig.8

